OM protein - protein search, using sw model

Run on: August 23, 2007, 12:57:35; Search time 210 Seconds

(without alignments)

27.962 Million cell updates/sec

Title: US-10-531-701-18

Perfect score: 72

Sequence: 1 CSSVTAWTTGCG 12

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2782304 seqs, 489333398 residues

Total number of hits satisfying chosen parameters: 1139688

Minimum DB seq length: 5
Maximum DB seq length: 30

Post-processing: Minimum Match 0%.

Maximum Match 100%

Listing first 300 summaries

Database : A Geneseq 200701:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: geneseqp2000s:*

4: geneseqp2001s:*

5: geneseqp2002s:*
6: geneseqp2003as:*

7: geneseqp2003bs:*

8: geneseqp2004s:*

9: geneseqp2005s:*

10: geneseqp2006s:*

11: geneseqp2007s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID	Description
. 1	72	100.0	12	8	AD085937	Ado85937 Cyclic po
2	41	56.9	12	8	ADO85941	Ado85941 Cyclic po
3	40	55.6	24	2	AAY09276	Aay09276 Antifreez
4	39	54.2	12	8	ADO85940	Ado85940 Cyclic po
5	38	52.8	9	5	AAU92600	Aau92600 PHOR1-F5D
6	38	52.8	9	5	AAU92399	Aau92399 PHOR1-F5D

€ .				
		·		
7	38 5:	· 2.8 9 5	AAU92809	Aau92809 PHOR1-F5D
8		2.8 10 5	AAU92956	Aau92956 PHOR1-F5D
9		2.8 10 5	AAU92653	Aau92653 PHOR1-F5D
10		2.8 10 5	AAU92816	Aau92816 PHOR1-F5D
11	38 5	2.8 25 4	AAB75264	Aab75264 Human sec
12	37 5	1.4 9 5	AAU92793	Aau92793 PHOR1-F5D
13	37 5	1.4 10 5	AAU92959	Aau92959 PHOR1-F5D
14		1.4 10 5	AAU92838	Aau92838 PHOR1-F5D
15		0.7 18 10	AEJ08867	Aej08867 Phage fd-
16		0.0 12 9	ADY41213	Ady41213 Human gua
. 17		0.0 12 9	ADY40991	Ady40991 Human gua
18		0.0 12 9	ADY41037	Ady41037 Human gua
19		0.0 12 9	AEB80440	Aeb80440 Human gua
20		0.0 12 9	AEB80662	Aeb80662 Human gua
21		0.0 12 9	AEB80486	Aeb80486 Human gua
22		0.0 12 10		Aek69806 Chymotryp
23		0.0 12 10		Aek70028 Chymotryp
24 25	•	0.0 12 10	AEK69852	Aek69852 Chymotryp
26		0.0 13 9 0.0 13 9	ADY41338 ADY41162	Ady41338 Human gua
27		0.0 13 9	ADY41162 ADY41468	Ady41162 Human gua
28		0.0 13 9	AEB80787	Ady41468 Human gua
29		0.0 13 9	AEB80917	Aeb80787 Human gua Aeb80917 Human gua
30		0.0 13 9	AEB80611	Aeb80611 Human gua
31		0.0 13 10	AEK70153	Aek70153 Chymotryp
32		0.0 13 10	AEK70283	Aek70133 Chymotryp
33		0.0 13 10	AEK69977	Aek69977 Chymotryp
34		0.0 14 9	ADY41722	Ady41722 Human gua
35		0.0 14 9	AEB81171	Aeb81171 Human gua
36		0.0 14 10	AEK70537	Aek70537 Chymotryp
37		0.0 17 2	AAR06081	Aar06081 Immunorea
38	36 50	0.0 26 6	ABJ19716	Abj19716 Human sec
39	36 50	0.0 26 6	ABP99743	Abp99743 Human sec
40	36 50	0.0 26 6	ABR01234	Abr01234 Human gen
41	36 50	0.0 26 6	ADA98331	Ada98331 Human sec
42	36 50	0.0 27 3	AAB39404	Aab39404 Human sec
43		8.6 12 6	ABR75736	Abr75736 Liver res
44		8.6 12 7	ADN07316	Adn07316 Liver res
45		8.6 25 5	ABG62949	Abg62949 Ligand/re
46		8.6 25 5	ABG62951	Abg62951 Ligand/re
47		8.6 25 5	ABG62952	Abg62952 Ligand/re
48		8.6 25 5	ABG62950	Abg62950 Ligand/re
49		8.6 25 8	ADM74130	Adm74130 Ligand/re
50		8.6 25 8	ADM74131	Adm74131 Ligand/re
51		8.6 25 8	ADM74134	Adm74134 Ligand/re
52		8.6 25 8	ADM74135	Adm74135 Ligand/re
. 53 54		8.6 27 5 8.6 27 5	ABG62946	Abg62946 Ligand/re
54 55		8.6 27 5 8.6 27 5	ABG62947 ABG62945	Abg62947 Ligand/re Abg62945 Ligand/re
56		8.6 27 5	ABG62948	Abg62945 Ligand/re Abg62948 Ligand/re
57		8.6 27 8	ADM74128	Adm74128 Ligand/re
58		8.6 27 8	ADM74128 ADM74129	Adm74129 Ligand/re
59		8.6 27 8	ADM74129 ADM74133	Adm74133 Ligand/re
60		8.6 27 8	ADM74133	Adm74133 Ligand/re
61		8.6 27 9	ADZ47462	Adz47462 Human HAS
62		7.2 8 8	ADJ66046	Adj66046 Human som
63		7.2 21 10		Aeh44929 IL-17 Zcy
•		•		·

```
RESULT 1
ADO85937
ID
     ADO85937 standard; peptide; 12 AA.
XX
AC
     ADO85937;
XX
DT
     29-JUL-2004
                  (first entry)
XX
DE
     Cyclic poly-alpha2,8-sialic acid (PSA) mimetic peptide p65 SeqID 18.
XX
KW
     B epitope; poly-alpha2,8-sialic acid; PSA; neural cell adhesion molecule;
KW
     NCAM; neurodegenerative disease; brain lesion; spine lesion;
KW
     age-related learning problem; memory problem; cancer; peptide therapy;
KW
     neuroprotective; cytostatic; mimetic; cyclic.
XX
OS
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
FT
     Disulfide-bond
                     1. .11
FT
                     /note = Disulphide bond cyclises peptide
XX
PN
     EP1411061-A1.
XX
PD
     21-APR-2004.
XX
PF
     16-OCT-2002; 2002EP-00292548.
XX
PR
     16-OCT-2002; 2002EP-00292548.
XX
PΑ
     (CNRS ) CNRS CENT NAT RECH SCI.
PΑ
     (UYAI-) UNIV AIX-MARSEILLE II.
PΑ
     (SCHA/) SCHAFER N.
PA
     (UYHA-) UNIV HAMBURG.
XX
DR
     WPI; 2004-319104/30.
XX
PT
     New poly-alpha2,9-sialic acid peptide mimetics comprising a B epitope
PT
     recognized by an antipoly-alpha2,8 sialic acid antibody, useful for
PT
     treating and/or preventing e.g. neurodegenerative diseases or cancer.
XX
PS
     Claim 3; SEQ ID NO 18; 36pp; English.
XX
CC
     This invention relates to novel peptides that comprise a B epitope
CC
     recognised by an anti-poly-alpha2,8-sialic acid (PSA) antibody.
CC
     Specifically, it refers to PSA mimetic peptides that can negatively
CC
     regulate cell surface interactions and hence modulate PSA-dependent
CC
     neural cell adhesion molecule (NCAM) functions both in vitro and in vivo.
CC
     The present invention describes these peptides or derived complexes
CC
     thereof as useful in the preparation of a medicament for treating and/ or
CC
     preventing a pathological condition including a neurodegenerative
CC
     disease, brain and spine lesions, age-related learning and memory
CC
     problems, as well as cancer. The peptide may also be used as a
CC
     complementary tool to uncover mechanisms of action and unknown functions
CC
     of the carbohydrate PSA. Accordingly, such pharmaceutical compositions
CC
     can be used appropriately in peptide therapy and exhibit neuroprotective
CC
     and cytostatic activities. This peptide sequence is a cyclic PSA mimetic
CC
     peptide of the invention.
```

```
XX
SQ Sequence 12 AA;

Query Match 100.0%; Score 72; DB 8; Length 12;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CSSVTAWTTGCG 12
| | | | | | | | | |
Db 1 CSSVTAWTTGCG 12
```

OM protein - protein search, using sw model

Run on: August 23, 2007, 12:57:49; Search time 339 Seconds

(without alignments)

37.951 Million cell updates/sec

US-10-531-701-18 Title:

Perfect score: 72

Sequence: 1 CSSVTAWTTGCG 12

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3281787 seqs, 1072124677 residues

Total number of hits satisfying chosen parameters: 41180

Minimum DB seq length: 5 Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database :

UniProt 8.4:*

1: uniprot_sprot:* 2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID	Descrip	otion
1	34	47.2	26	2	Q9TR94_SHEEP	Q9tr94	ovis aries
2	32	44.4	26	2	Q79DW7_AZOVI	Q79dw7-	azotobacter
3	32	44.4	29	1	VARF VIOAR	P58451	viola arven
4	31	43.1	30	2	Q3A9Y9_CARHZ	Q3a9y9	carboxydoth
5	30	41.7	22	2	Q93UU5_ECO57	Q93uu5	escherichia
6	30	41.7	25	2	Q865G5_HYLSY	. Q865g5	hylobates s
7	30	41.7	27	1	CXO6A_CONRA	P58914	conus radia
8	29	40.3	21	1	ALL7_OLEEU	P81430	olea europa
9	29	40.3	24	2	Q4XAU4_PLACH	Q4xau4	plasmodium
10	29	40.3	25	1	MT_AGABI	P04358	agaricus bi
11	28	38.9	18	2	Q9ZG65_CHLTR	Q9zg65	chlamydia t
12	28	38.9	20	2	Q9UDF5_HUMAN	Q9udf5	homo sapien
13	28	38.9	27	2	Q6WYW0_9PERC	Q6wyw0	luvarus imp
14	28	38.9	27	. 2	Q6WYV8_9PERC	Q6wyv8	paracanthur
15	28	38.9	27	2	Q6WYV3_9PERC	Q6wyv3	acanthurus

,	4								
ا معر العوال	-								
	•								
	16	28	38.9	27	2	Q6WYV1_9PERC		Q6wyv1 acanthurus	
	17	28	38.9	27	2	Q6WYU4_9PERC		Q6wyu4 ctenochaetu	
	18 19	28 28	38.9 38.9	. 27 27	2 2	Q6WYU5_9PERC Q6WYU8 9PERC		Q6wyu5 acanthurus Q6wyu8 acanthurus	
	20	28	38.9	. 27	2	Q6WYT2 9PERC		Q6wyt2 naso macula	
	21	28	38.9	27	2	Q6WYT9_9PERC		Q6wyt9 naso caerul	
	22	28	38.9	27	2	Q6WYU9_9PERC		Q6wyu9 acanthurus	
	23 24	28 28	38.9 38.9	27 27	2 2	Q6WYT7_9PERC Q6WYS5_9PERC	·	Q6wyt7 naso elegan Q6wys5 naso unicor	
	25	28	38.9	27	2	Q6WYV2_9PERC		Q6wyv2 acanthurus	
	26	28	38.9	27	2	Q6WYT5_9PERC		Q6wyt5 naso hexaca	
	27 28	28 28	38.9 38.9	27 27	2 2	Q6WYS8_9PERC		Q6wys8 naso thynno	
	29 29	28	38.9	27	2	Q6WYV9_9PERC Q6WYV7 9PERC		Q6wyv9 zanclus cor Q6wyv7 prionurus m	
	30	28	38.9	27	2	Q6WYV0_9PERC		Q6wyv0 acanthurus	
	31	28	38.9	27	2	Q6WYU1_9PERC		Q6wyul naso brachy	
	32 33	28 _. 28	38.9 38.9	27 27	2 2	Q6WYT1_9PERC Q6WYT3 9PERC		Q6wyt1 naso mcdade Q6wyt3 naso lopezi	
	34	28	38.9	27	2	Q6WYT4_9PERC		Q6wyt4 naso litura	
	35	. 28	38.9	27	2	Q6WYT8_9PERC	•	Q6wyt8 naso caesiu	
	36 37	28	38.9	27	2	Q6WYT0_9PERC		Q6wyt0 naso minor.	•
	38	28 28	38.9 38.9	27 27	2 2	Q6WYU2_9PERC Q6WYS4_9PERC	·	Q6wyu2 naso annula Q6wys4 naso vlamin	
	39	28	38.9	27	2	Q6WYT6_9PERC	•	Q6wyt6 naso fageni	
	40	28	38.9	27	2	Q6WYS3_9PERC		Q6wys3 naso sp. 1-	
	41 42	28	38.9	27 27	2	Q6WYU3_9PERC		Q6wyu3 ctenochaetu	
	43	28 28	38.9 38.9	27 27	2 2	Q6WYU0_9PERC Q6WYS7 9PERC	•	Q6wyu0 naso brevir Q6wys7 naso tongan	
	44	28	38.9	27	2	Q6WYV4_9PERC		Q6wyv4 zebrasoma v	
	45	28	38.9	27	2	Q6WYV6_9PERC		Q6wyv6 prionurus s	
	46 47	28 28	38.9 38.9	27 27	2 2	Q6WYU7_9PERC Q6WYS9_9PERC		Q6wyu7 acanthurus Q6wys9 naso reticu	
	48	28	38.9	27	2	Q6WYU6 9PERC		Q6wyu6 acanthurus	
	49	28	38.9	27	2	Q6WYS6_9PERC	•	Q6wys6 naso tubero	•
	50	28	38.9	28	2	Q4X2U3_PLACH		Q4x2u3 plasmodium	
	51 52	28 27	38.9 37.5	29 16	2 2	Q9N1W3_HORSE Q3ZEV7 9CHAR	•	Q9n1w3 equus cabal Q3zev7 tringa stag	
	53	27	37.5	23	2	Q9R2G4_KLEPN		Q9r2g4 klebsiella	
	54	27	37.5	27	2	Q9MKR2_MELGA		Q9mkr2 meleagris g	•
	55 56	27 27	37.5 37.5	27 27	2	Q45UI9_9HIV1 Q45UI5_9HIV1		Q45ui9 human immun Q45ui5 human immun	
	57	27	37.5	27	2	Q45UI6_9HIV1		Q45ui6 human immun	
	58	27	37.5	27	2	Q45UI8_9HIV1	•*	Q45ui8 human immun	
	59 60	27	37.5	27	2	Q45UI7_9HIV1		Q45ui7 human immun	
	60 61	27 27	37.5 37.5	28 28	2 2	Q5EMT0_MAGGR Q4RCL2_TETNG		Q5emt0 magnaporthe Q4rcl2 tetraodon n	
	62	26	36.1	11	2	Q99JC3_9MURI		Q99jc3 rattus sp.	
	63	26	36.1	16	2	Q8HUM0_9MAGN	•	Q8hum0 eudicot env	١
	6 <u>4</u> 65	26 26	36.1 36.1	16 19	2 2	Q8HUM1_9POAL Q41567_WHEAT		Q8hum1 uncultured Q41567 triticum ae	1
	66	26	36.1	20	1	NLTP1_HELAN	-	P82007 helianthus	
	67	26	36.1	21	2	Q8MJP1_CALJA		Q8mjp1 callithrix	
	68	26 26	36.1	21	2	Q8MJP4_SAGFU		Q8mjp4 saguinus fu	
	69 70 .	26 26	36.1 36.1	21 24	2 2	Q8MJP0_CEBPY Q7M1P2_HELAN		Q8mjp0 cebuella py Q7mlp2 helianthus	
	71	26	36.1	25	2	Q23QB2_TETTH	•	Q23qb2 tetrahymena	
	72	26	36.1	26	2	Q2HWU6_DROSE		Q2hwu6 drosophila	
				•					
								•	
						•			

OM protein - protein search, using sw model

Run on: August 23, 2007, 13:01:39 ; Search time 38 Seconds

(without alignments)

30.384 Million cell updates/sec

Title: US-10-531-701-18

Perfect score: 72

Sequence: 1 CSSVTAWTTGCG 12

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 6197

Minimum DB seq length: 5
Maximum DB seq length: 30

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : PIR_80:*

1: pir1:*
2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		٠, ٠				÷
Result		Query				•
No.	Score	Match	Length :	DB	ID ·	Description
1	34	47.2	19	2	S57515	T cell receptor be
2	33	45.8	19	2	S57516	T cell receptor be
3	33	45.8	25	2	B44908	chitinase (EC 3.2.
4	30	41.7	20	2	PH1358	Ig heavy chain DJ
5	30	41.7	22	2	PT0303	Ig heavy chain CDR
6	30	41.7	28	2	PH1363	Ig heavy chain DJ
7	29	40.3	17	2	PH1331	Ig heavy chain DJ
8	29	40.3	25	1	SMMR	metallothionein -
. 9	28	38.9	19	2	PH1352	Ig heavy chain DJ
10	28	38.9	19	2	PH1315	Ig heavy chain DJ
11	27	37.5	23	2	A43872	fimbrial adhesin C
12	. 26	36.1	23	2	S07967	T-cell receptor be
13	26	36.1	24	2	PH0084	fatty acid-binding

						•
14	26	36.1	25	2	S71387	alpha-2-macroglobu
15	26	36.1	28	2	I52627	erythrocyte chemok
16	25	34.7	20	2	S66222	defensin AMP2 - Da
17	25	34.7	21	2	S28436	major outer membra
18	25	34.7	22	2	A35418	brain natriuretic
19	25	34.7	25	2	A49389	alkaline serine pr
20	25	34.7	28	2	S07826	venom protein - Am
21	25	34.7	29	2	S58388	T-cell receptor be
22	25 25	34.7	30	1	SNUMP	sillucin - Rhizomu
23 24	25 25	34.7	.30	. 2 2	S05223	photosystem I 6.5K
25	25 24	34.7 33.3	30 11	2	Н97596 S66196	hypothetical prote alcohol dehydrogen
26	24	33.3	14	2	PH0747	T-cell receptor be
27	24	33.3	15	2	PH0.750	T-cell receptor be
28	24	33.3	26	2	S55029	CAP3 protein - ant
29	24	33.3	26	2	A58955	metalloendoprotein
30	24	33.3	27	2	T06375	probable ferredoxi
31	24	33.3	. 27	2	S77649	hypothetical prote
32	. 24	33.3	29	2	PH0259	T-cell receptor Vb
33	24	33.3	29	2	A56283	kalata B1 [validat
34	23.5	32.6	20	2	S38763	S-adenosyl-L-methi
35	23	31.9	13	2	B26406	Ig kappa chain J r
36	23	31.9	13	2	A47630	Ig kappa chain J r
37	23	31.9	18	2	S19914	choline O-acetyltr
38	23	31.9	19	2	A44379	alpha-conotoxin SI
39	23	31.9	22	2	B26212	carboxypeptidase B
40	23	31.9	22	2	S42567	cytochrome-b5 redu
41	23	31.9	26	1	SMNC	metallothionein -
42	23	31.9	28	2	C35948	phospholipase A2 (
43	23	31.9	29	2	B43620	omega-conotoxin GV
44	23	31.9	30	2	S68639	nigroxin A - black
45	23	31.9	30	2	S68640	nigroxin B - black
46	22	30.6	9	2	S07241	litorin - Rohde's
47	22	30.6	10	2	T17057	cytochrome-c oxida
48 49	22	30.6	10	2	T12303	cytochrome-c oxida
50	22 22	30.6 30.6	10 10	2	T17060 T17072	cytochrome-c oxida cytochrome-c oxida
51	22	30.6	12	2	PH1675	Ig heavy chain V r
52	22	30.6	13	2	PH1676	Ig heavy chain V r
53	22	30.6	14	2	PH1677	Ig heavy chain V r
54	22	30.6	15	2	PH0751	T-cell receptor be
55	22	30.6	17	2	I67524	CD33 antigen homol
56	22	30.6	18	2	S23971	alpha-macroglobuli
57	22	30.6	19	2	G49048	T-cell receptor be
58	22	30.6	20	2	T46626	hypothetical prote
59	22	30.6	21	2	PH1690	Ig heavy chain V r
60	22	30.6	21	2	PH1688	Ig heavy chain V r
61	22	30.6	22	2	PH1680	Ig heavy chain V r
62	22	30.6	22	2	PH1679	Ig heavy chain V r
63	22	30.6	22	2	PH1678	Ig heavy chain V r
64	22	30.6	23	2	PH1689	Ig heavy chain V r
65	22	30.6	23	2	PH1694	Ig heavy chain V r
66	22	30.6	23	2	PH1695	Ig heavy chain V r
67	22	30.6	23	2	PH1693	Ig heavy chain V r
68	22	30.6	23	2	PH1681	Ig heavy chain V r
69	22	30.6	23	2	PH1682	Ig heavy chain V r
70	22	30.6	23	2	PH1691	Ig heavy chain V r

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:06; Search time 69 Seconds

(without alignments)

163.111 Million cell updates/sec

Title: SEQ18-SEQ18

Perfect score: 138

Sequence: 1 CSSVTAWTTGcCSSVTAWTTGcg 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2782304 seqs, 489333398 residues

Total number of hits satisfying chosen parameters: 2782304

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : A_Geneseq_200701:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: geneseqp2000s:*

4: geneseqp2001s:* 6

5: geneseqp2002s:*

6: geneseqp2003as:*

7: geneseqp2003bs:*

8: geneseqp2004s:*

9: geneseqp2005s:*

10: geneseqp2006s:*

11: geneseqp2007s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB.	ID .	Description
1	72	52.2	12	8	 ADO85937	Ado85937 Cyclic po
2	72	52.2	753	8	ADD33337	Adp30988 Human sec
3	72	52.2	1861	10	AEI57987	Aei57987 Thale cre
4	69	50.0	1509	10	AEI57371	Aei57371 Thale cre
5	69	50.0	1510	10	AEI56371	Aei56371 Thale cre
6	69	50.0	1600	· 10	AEI56169	Aei56169 Zea mays

						•
7	69	50.0	1847	10	AEI58385	Aei58385 Zea mays
8	68.5	49.6	1396	10	AEI55999	Aei55999 Thale cre
9	68	49.3	1432	10	AEI56479	Aei56479 Zea mays
10	68	49.3	1440	.10	AEI57593	Aei57593 Thale cre
11	68	49.3	1965	10	AEI56625	Aei56625 Zea mays
12	68	49.3	2280	10	AEI57411	Aei57411 Thale cre
13	68	49.3	2487		AEI57141	Aei57141 Thale cre
14	68	49.3	2616	9	AEB49675	Aeb49675 N. mening
						-
15	67.5	48.9	1434	10	AEI56727	Aei56727 Zea mays
16	67	48.6	1577	10	AEI56651	Aei56651 Zea mays
17	66	47.8	762	8	ADP31012	Adp31012 Human sec
18	66	47.8	824	10	AEI56575	Aei56575 Zea mays
19	66	47.8	885	8	ADP31011 "	Adp31011 Human sec
20	66	47.8	1537	10	AEI56249	Aei56249 Zea mays
21	66	47.8	1568	10	AEI58079	Aei58079 Thale cre
22	66	47.8	1595	10	AEI57633	Aei57633 Thale cre
23	66	47.8	1696	10	AEI56163	Aei56163 Zea mays
24	66	47.8	1951	10	AEI58651	Aei58651 Soybean p
25	66	47.8	2268	10	AEI57595	Aei57595 Thale cre
26	66	47.8	2328	10	AEI57469	· Aei57469 Thale cre
27	66	47.8	2484	8	ADP66690	Adp66690 Human mis
28	65.5		1092	8	ADP31153	
		47.5				Adp31153 Human sec
29	65 55	47.1	1305	10		Aei57293 Thale cre
30	65	47.1	1324	10	AEI58241	Aei58241 Thale cre
31	65	47.1	1401	10	AEI56871	Aei56871 Thale cre
32	65	47.1	1527	10	AEI56859	Aei56859 Thale cre
33	65	47.1	1602	10	AEI56221	Aei56221 Zea mays
34	65	47.1	1623	10	AEI57045	Aei57045 Thale cre
35	65	47.1	2017	10	AEI58215	Aei58215 Zea mays
36	65	47.1	2119	10	AEI60331	Aei60331 Bread whe
37	65	47.1	2380	10	AEI57231	Aei57231 Thale cre
38	65	47.1	2499	1.0	AEI55671	Aei55671 Thale cre
39	65	47.1	2762	10	AEI58209	Aei58209 Thale cre
40	65	47.1	3331	10	AEI57107	Aei57107 Thale cre
41	64.5	46.7	1069	10	AEI56761	Aei56761 Zea mays
42	64.5	46.7	1357	10	AEI57257	Aei57257 Thale cre
43	64.5	46.7	1359	10	AEI56507	Aei56507 Thale cre
44	64.5	46.7	1566	10	AEI55755	Aei55755 Thale cre
45	64.5	46.7	1855	10	AEI58011	Aei58011 Thale cre
46	64.5	46.7	1856	10	AE155855	Aei55855 Thale cre
47	64	46.4	240	8	ADP31579	Adp31579 Human sec
48	64	46.4	619	10	AEI56055	Aei56055 Zea mays
49	64	46.4	1002	8	ADP30866	Adp30866 Human sec
50	64	46.4	1117	10	AEI56991	Aei56991 Thale cre
51	64	46.4	1170	8	ADP30919	Adp30919 Human sec
52	64	46.4	1170	8	ADP30922	Adp30922 Human sec
53	64	46.4	1194	10	AEI57861	Aei57861 Thale cre
54	64	46.4	1293	10	AEI58071	Aei58071 Thale cre
55	64	46.4	1293	10	AEI57643	Aei57643 Thale cre
56	64	46.4	1407	10	AEI55655	Aei55655 Thale cre
57	64	46.4	1419	10	AEI55665	Aei55665 Thale cre
58	64	46.4	1435	10	AE160567	Aei60567 Soybean p
						<u>-</u>
59	64	46.4	1490	10	AEI58067	Aei58067 Thale cre
60	64	46.4	1676	10	AEI56079	Aei56079 Zea mays
61	64	46.4	1682	10	AEI57991	Aei57991 Thale cre
62	64	46.4	1691	10	AEI56295	Aei56295 Zea mays
63	64	46.4	2458	10	AEI57027	Aei57027 Thale cre

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:06; Search time 69 Seconds

(without alignments)

163.111 Million cell updates/sec

Title: SEQ18-SEQ22

Perfect score: 132

Sequence: 1 CSSVTAWTTGCCSKIASMETGCG 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2782304 seqs, 489333398 residues

Total number of hits satisfying chosen parameters: 2782304

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : A_Geneseq_200701:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: geneseqp2000s:*

4: geneseqp2001s:*

5: geneseqp2002s:*

6: geneseqp2003as:*

7: geneseqp2003bs:*

8: geneseqp2004s:*

9: geneseqp2005s:*

10: geneseqp2006s:*

11: geneseqp2007s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID	Description
1	67	50.8	3723	10	AEI58335	Aei58335 Zea mays
2	. 66	50.0	12	8	ADO85941	Ado85941 Cyclic po
. 3	66	50.0	12	8	ADO85937	Ado85937 Cyclic po
4	66	50.0	1509	10	AEI57371	Aei57371 Thale cre
5	66	50.0	1510	10	AEI56371	Aei56371 Thale cre
6	64	48.5	1568	10	AEI58079	Aei58079 Thale cre

7	64	48.5	1595	10	AEI57633	Aei57633 Thale cre
8	62	47.0	152	8	ADY06675	Ady06675 Plant ful
.9	62	47.0	882	8	ADP31688	Adp31688 Human sec
10	61	46.2	1269	8	ADU23456	Adu23456 Sulfolobu
11	61	46.2	1704	10	AEI56537	Aei56537 Thale cre
12	61	46.2	1861	10	AEI57987	Aei57987 Thale cre
13	60.5	45.8	893	10	AEI57475	Aei57475 Thale cre
14	60.5	45.8	1092	8	ADP31153	Adp31153 Human sec
15	60	45.5	753	8	ADP30988	Adp31133 Human sec Adp30988 Human sec
16	60 ·			10		
17			1422	10	AEI56223	Aei56223 Zea mays
18	60	45.5	1435	10	AEI60567	Aei60567 Soybean p
	60 60	45.5	1691 1711	10	AEI56295 AEI57723	Aei56295 Zea mays
19 20	60	45.5				Aei57723 Zea mays
		45.5	1833	8	ADP30642	Adp30642 Human sec
21	60 50	45.5	2344	10	AEI57029	Aei57029 Thale cre
22	59 50	44.7	12	8	AD085940	Ado85940 Cyclic po
23	59 50	44.7	1407	10	AEI55655	Aei55655 Thale cre
24	59	44.7	1440	10	AEI57593	•
25	59	44.7	1616	8	ADP31004	Adp31004 Human sec
26	59	44.7	1616	8	ADP30987	Adp30987 Human sec
27	59	44.7	1616	8	ADP30967	Adp30967 Human sec
28	59	44.7	1682	10	AEI57991	Aei57991 Thale cre
29	59	44.7	1806	10	AEI56405	Aei56405 Zea mays
30	59	44.7	1848	10	AEI56905	Aei56905 Zea mays
31	58.5	44.3	1818	10	AEI56265	Aei56265 Zea mays
32	58	43.9	672	8	ADP30498	Adp30498 Human sec
33	58	43.9	1401	8	ADP30532	Adp30532 Human sec
34	58	43.9	1401	10	AEI56871	Aei56871 Thale cre
35	58	43.9	1420	8	ADP30944	Adp30944 Human sec
36	58	43.9	1470	8	ADP31290	Adp31290 Human sec
37	58	43.9	1638	10	AEI56193	Aei56193 Zea mays
38	. 58	43.9	2280	10	AEI57411	Aei57411 Thale cre
39	58	43.9	2380	10	AEI57231	Aei57231 Thale cre
40	58	43.9	2487	10	AEI57141	Aei57141 Thale cre
41	58	43.9	2628.	10	AEI58225	Aei58225 Zea mays
42	58	43.9	3331	10	AEI57107	Aei57107 Thale cre
43	57.5	43.6	484	8	ADP31628	Adp31628 Human sec
44	57.5	43.6	583	8	ADP30553	Adp30553 Human sec
4.5	57.5	43.6	1419	10	AEI55665	Aei55665 Thale cre
46	57.5	43.6	1462	10	AEI56707	Aei56707 Zea mays
47	57.5	43.6	1490	10	AEI58067	Aei58067 Thale cre
48	5 7.5	43.6	1750	10	AEI56103	Aei56103 Thale cre
49	57.5	43.6	1751	10	AEI57959	Aei57959 Thale cre
50	57.5	43.6	1869	10	AEI57877	Aei57877 Thale cre
51	57	43.2	501	8	ADP31689	Adp31689 Human sec
52	57	43.2	507	8	ADP30869	Adp30869 Human sec
53	57	43.2	856	8	ADP30972	Adp30972 Human sec
54	57	43.2	1195	10	AEI57953	Aei57953 Thale cre
55	57	43.2	1199	10	AEI55925	Aei55925 Thale cre
56	57	43.2	1215	8	ADP30898	Adp30898 Human sec
57	57	43.2	1215	8	ADP30900	Adp30900 Human sec
58	57	43.2	1231	10	AEI57495	Aei57495 Thale cre
59	57	43.2	1248	8	ADP31346	Adp31346 Human sec
60	57	43.2	1337	10	AEI56893	Aei56893 Thale cre
61	57	43.2	1371	10	AEI57113	Aei57113 Thale cre
62	57	43.2	1383	10	AEI57315	Aei57315 Thale cre
63	57	43.2	1533	10	AEI57589	Aei57589 Thale cre
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OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:06; Search time 69 Seconds

(without alignments)

163.111 Million cell updates/sec

Title: SEQ22-SEQ18

Perfect score: 132

Sequence: 1 CSKIASMETGCCSSVTAWTTGCG 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2782304 seqs, 489333398 residues

Total number of hits satisfying chosen parameters: 2782304

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : A Geneseq 200701:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: geneseqp2000s:*

4: geneseqp2001s:*

5: geneseqp2002s:*

6: geneseqp2003as:*

7: geneseqp2003bs:*

8: geneseqp2004s:*

9: geneseqp2005s:*

10: geneseqp2006s:*

11: geneseqp2007s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID .	Description
1	72	54.5	12	8	ADO85937	Ado85937 Cyclic po
2	64	48.5	1396	10	AEI55999	Aei55999 Thale cre
3	63	47.7	753	8	ADP30988	Adp30988 Human sec
4	62.5	47.3	1691	10	AEI56295	Aei56295 Zea mays
5	62	47.0	2280	10	AEI57411	Aei57411 Thale cre
6	62	47.0	2487	10	AEI57141	Aei57141 Thale cre

					•	
7	61.5	46.6	1951	10	AEI58651	Aei58651 Soybean p
8	61	46.2	2604	10	AEI57169	Aei57169 Thale cre
9	61	46.2	3723	10	AEI58335	Aei58335 Zea mays
10	60	45.5	12	8	ADO85941	Ado85941 Cyclic po
11	60	45.5	1209	10	AEI59917	Aei59917 Bread whe
12	60	45.5	1965	10	AEI56625	Aei56625 Zea mays
13	60	45.5	2499	10	AEI55671	Aei55671 Thale cre
14	- 60	45.5	2773	10	AEI56999	Aei56999 Thale cre
15	60	45.5	2791	10	AEI58359	Aei58359 Thale cre
16	60	45.5	3060	10	AEI57065	Aei57065 Thale cre
17	59.5	45.1	1069	10	AEI56761	Aei56761 Zea mays
18	59.5	45.1	1446	10	AEI56195	Aei56195 Zea mays
19	59.5	45.1	1833	8	ADP30642	Adp30642 Human sec
20	59	44.7	619	10	AEI56055	Aei56055 Zea mays
21	59	44.7	1336	10	AEI56065	Aei56065 Zea mays
22	59 ·	44.7	1420	8 .	ADP30944	Adp30944 Human sec
23	59	44.7	1430	10	AEI56515	Āei56515 Zea mays
24	59	44.7	1549	10	AEI56141	Aei56141 Zea mays
25	59	44.7	2119	10	AEI60331	Aei60331 Bread whe
26	59	44.7	2268	10	AEI57595	Aei57595 Thale cre
27	59	44.7	2328	10	AEI57469	Aei57469 Thale cre
28	59	44.7	2514	8	ADP30727	Adp30727 Human sec
29	59	.44.7	2828	8	ADP30938	Adp30938 Human sec
30	58.5	44.3	137	7	ABO80869	Abo80869 Pseudomon
31	58.5	44.3	1233	8	ADP30523	Adp30523 Human sec
32	58.5	44.3	1602	10	AEI56221	Aei56221 Zea mays
33	58	43.9	1131	10	AEI57137	Aei57137 Thale cre
34	58	43.9	1345	1.0	AEI57781	Aei57781 Zea mays
35	58	43.9	1806	10	AEI56405	Aei56405 Zea mays
36	58	43.9	2272	8	ADP31136	Adp31136 Human sec
37	58	43.9	2314	10	AEI57977	Aei57977 Thale cre
38	58	43.9	4659	10	AEI57349	Aei57349 Thale cre
39	57.5	43.6	994	10	AEI56451	Aei56451 Zea mays
40	57.5	43.6	1209	10	AEI57417	Aei57417 Thale cre
41	57.5	43.6	1431	10	AEI57865	Aei57865 Thale cre
42	57.5	43.6	1527	10	AEI56859	Aei56859 Thale cre
43	57.5	43.6	3426	10	AEI57085	Aei57085 Thale cre
44	57	43.2		8	ADP30553	Adp30553 Human sec
45	57	43.2	1067	10	AEI57251	Aei57251 Thale cre
46	57	43.2	1116	8	ADP31203	Adp31203 Human sec
47	57	43.2	1116	8	ADP31202	Adp31202 Human sec
48	57	43.2	1250	10	AEI57421	Aei57421 Thale cre
49	57	43.2	1251	10	AEI55959	Aei55959 Thale cre
50	57	43.2	1289	8	ADP30675	Adp30675 Human sec
51	57	43.2	1292	10	AEI57269	Aei57269 Thale cre
52	57	43.2	1293	10	AEI56357	Aei56357 Thale cre
53	57	43.2	1337	10	AEI55909	Aei55909 Thale cre
54	57	43.2	1413	10	AEI56187	Aei56187 Zea mays
55	57	43.2	1462	10	AEI56075	Aei56075 Zea mays
56	57	43.2	1481	8	ADP30948	Adp30948 Human sec
57	57	43.2	1486	10	AEI58055	-
58	57	43.2	1500	10	AEI57055	Aei57055 Thale cre
59	57	43.2	1506	8	ADP30596	Adp30596 Human sec
60	57	43.2	1509	10	AEI57371	Aei57371 Thale cre
61	57	43.2	1510	10	AEI56371	Aei56371 Thale cre
62	57	43.2	1539	8	ADP31201	Adp31201 Human sec
63	57	43.2	1539	8	ADP31200	Adp31200 Human sec
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OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:06; Search time 69 Seconds

(without alignments)

163.111 Million cell updates/sec

Title: SEQ22-SEQ22

Perfect score: 126

Sequence:

1 CSKIASMETGCcskiasmetgcg 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched:

2782304 segs, 489333398 residues

Total number of hits satisfying chosen parameters:

2782304

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database :

A_Geneseq_200701:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*
- 9: geneseqp2005s:*
- 10: geneseqp2006s:*
- 11: geneseqp2007s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID	Description
1	66	52.4	12	8	ADO85941	Ado85941 Cyclic po
2	64	50.8	3723	10	AEI58335	Aei58335 Zea mays
3	59	46.8	12	8	ADO85940	Ado85940 Cyclic po
4	57	45.2	2828	8	ADP30938	Adp30938 Human sec
5	55	43.7	51	4	ABB03442	Abb03442 Human mus
6	55	43.7	51	6	ABU12736	Abu12736 Novel hum

7	55	43.7	51	8	ADJ28762	Adj28762 Human mus
8	55	43.7	171	5	AAE18324	Aae18324 Sheep ker
9	54	42.9	174	9	AEA15441	Aea15441 Human pol
10	54	42.9	174	10	AEK59301	Aek59301 Human ker
11	54	42.9	174	10	AEL18833	Ael18833 Human ker
12	54	42.9	1509	10	AEI57371	Aei57371 Thale cre
13	54	42.9	1510	10	AEI56371	Aei56371 Thale cre
14	53	42.1	615	8	ADP30803	Adp30803 Human sec
15	53	42.1	1035	9	AED44877	Adp30003 Naman see Aed44877 Aurora pr
16	53	42.1	1779	10	AEI56971	Aei5697,1 Thale cre
17	53	42.1	2808	8	ADP31258	Adp31258 Human sec
18	53	42.1	4683	8	ADP31260	Adp31250 Human sec
19	53	42.1	4848	8	ADP31259	Adp31250 Human sec
20	52	41.3	507	8	ADP30869	
21	52	41.3	1215	10	AEI58333	Aei58333 Zea mays
22	52	41.3	1549	10	AEI56141	Aei56141 Zea mays
23	52	41.3	1639	10	AEI56667	Aei56667 Zea mays
24	52	41.3	1825	10	AEI56415	Aei56415 Zea mays
25		41.3	2101	10	AEI56311	Aei56311 Zea mays
26	52	41.3	2280	10	AEI57411	Aei57411 Thale cre
27	52	41.3	2487	10	AEI57141	Aei57111 Thate cre
28	52	41.3	2604	10	AEI57169	Aei57169 Thale cre
29	51.5	40.9	1481	10	AEI56411	Aei56411 Zea mays
30	51	40.5	753	8	ADP30988	Adp30988 Human sec
31	51	40.5	1042	10	AEI55889	Aei55889 Thale cre
32	51	40.5	1042	10	AEI58033	Aei58033 Thale cre
33	51	40.5	1071	9	AEC05688	Aec05688 Human pep
34	51	40.5	1071	10	AEH16870	Aeh16870 Human pep
35	51	40.5	1191	8	ADP30993	Adp30993 Human sec
36	51	40.5	1316	10	AEI56237	Aei56237 Zea mays
37	51	40.5	1498	8	ADP30684	Adp30684 Human sec
38	51	40.5	1815	8	ADP31601	Adp31601 Human sec
39	51	40.5	1833	8	ADP30642	Adp30642 Human sec
40	51	40.5	2598		AEI57021	Aei57021 Thale cre
41	50.5	40.1	396	8	ADP31625	Adp31625 Human sec
42	50.5	40.1	504	8	ADP31624	Adp31624 Human sec
43	50.5	40.1	1431	8	ADP31051	Adp31051 Human sec
44	50	39.7	252	8	ADP31487	Adp31487 Human sec
45	50	39.7	348	8	ADP31676	Adp31676 Human sec
46	50	39.7	856	8	ADP30972	Adp30972 Human sec
47	50	39.7	906	8	ADP31344	Adp31344 Human sec
48	50	39.7	1192	8 .	ADP31180	Adp31180 Human sec
49	50	39.7	1205	10	AEI58291	Aei58291 Thale cre
50	50	39.7	1289	8	ADP30675	Adp30675 Human sec
51	50	39.7	1302	8	ADP31695	Adp31695 Human sec
52	50	39.7	1432	10	AEI56633	Aei56633 Zea mays
53	50	39.7	1464	10	AEI56649	Aei56649 Zea mays
54	50	39.7	1568	10	AEI58079	Aei58079 Thale cre
55	50	39.7	1595	10	AEI57633	Aei57633 Thale cre
56	50	39.7	1611	10	AEI57767	Aei57767 Thale cre
57	50	39.7	1611	10	AEI58085	Aei58085 Thale cre
58	50	39.7	1638	10	AEI56193	Aei56193 Zea mays
59	50	39.7	1806	10	AEI56405	Aei56405 Zea mays
60	50	39.7	2344	10	AEI57029	Aei57029 Thale cre
61	50	39.7	3046	8	ADP31684	Adp31684 Human sec
62	50	39.7	3579	8	ADP31098	Adp31098 Human sec
63	50	39.7	4659	10	AEI57349	Aei57349 Thale cre

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:59; Search time 166 Seconds

(without alignments)

148.996 Million cell updates/sec

Title: SEQ18-SEQ18

Perfect score: 138

Sequence: 1 CSSVTAWTTGcCSSVTAWTTGcg 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3281787 seqs, 1072124677 residues

Total number of hits satisfying chosen parameters: 3281787

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database: U

UniProt_8.4:*

1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID	Descrip	otion
1	57	41.3	38	1	COAT3 BPPHL	P68672	bacteriopha
2	57	41.3	38	1	COAT3_XANCP	P68671	xanthomonas
3	57	41.3	38	2	Q3BSR4_XANC5	Q3bsr4	xanthomonas
4	57	41.3	38	2	Q4UUU6_XANC8	Q4uuu6	xanthomonas
5	57	41.3	647	2	Q9PT10_ONCMY	Q9pt10	oncorhynchu
6	56.5	40.9	257	1	CJ095 HUMAN	Q9h7t3	homo sapien
7	56.5	40.9	. 569	. 2	Q4QGR6_LEIMA	Q4qgr6	leishmania
8	56	40.6	965	2	Q23JG4 TETTH	Q23jg4	tetrahymena
9	54.5	39.5	725	2	Q4T771_TETNG	Q4t771	tetraodon n
10	54.5	39.5	1044	2	Q4RU50_TETNG	Q4ru50	tetraodon n
11	54 .	39.1	239	2	Q4S5B5_TETNG	Q4s5b5	tetraodon n
12	54	39.1	714	2	Q51753_PSEFL	Q51753	pseudomonas
13	54	39.1	2289	2	Q4S3T6_TETNG	Q4s3t6	tetraodon n
14	53.5	38.8	563	2	Q5NZ27_AZOSE	Q5nz27	azoarcus sp
15	53	38.4	291	2	Q2JH08_FRASC	Q2jh08	frankia sp.

16	53	38.4	483	2	Q4DW34 TRYCR	O4dw34	trypanosoma
17	53	38.4	547	2	Q3TXH8_MOUSE		mus musculu
18	53	38.4	757	2	Q2Z090_9GAMM		uncultured
19	52.5	38.0	62	2	Q6H539_ORYSA	•	orýza sativ
20	52.5	38.0	270	2	Q9LH57 ARATH		arabidopsis
21	52.5	38.0	282	2	Q9C7C1 ARATH		_
22							arabidopsis
	52.5	38.0	443	2	Q3TGD7_MOUSE	-	mus musculu
23	52.5	38.0	503	2	Q3TL84_MOUSE		mus musculu
24	52.5	38.0	539	1	LRMP_MOUSE		mus musculu
25	52.5	38.0	539	2	Q3TVR1_MOUSE		mus musculu
26	52.5	38.0	582	2	Q1E148_COCIM		coccidioide
27	52	37.7	305	. 1	POPD3_CHICK	_	gallus gall
28	52	37.7	431	2	Q5GVM4_XANOR	<u> </u>	xanthomonas
29	52	37.7	435	2	Q3JP43_BURP1	Q3jp43	burkholderi
30	52	37.7	474	2	O49335_ARATH	049335	arabidopsis
31	52	37.7	480	2	Q8RWE3_ARATH	Q8rwe3	arabidopsis
32	52	37.7	542	2	Q235T5_TETTH	Q235t5	tetrahymena
33	52	37.7	693	2	Q9DG20 CHICK	Q9dg2(gallus gall
34	52	37.7	922	2	Q2R1X1 ORYSA		oryza sativ
35	52	37.7	1214	2	Q4P8U0 USTMA		ustilago ma
36	51.5	37.3	305	2	Q387P3 9TRYP	_	trypanosoma
37	51.5	37.3	497	2	Q947N0 ORYSA		oryza sativ
38	51.5	37.3	498	2	Q6K9G3 ORYSA		oryza sativ
39	51.5	37.3	797	2	Q8UW62_ORENI	_	creochromis
40	51	37.0	58	2	Q33B75_ORYSA		oryza sativ
41	51	37.0	208	2	Q5YTQ3_NOCFA		nocardia fa
42	51	37.0	220	2	Q2U0X3_ASPOR		aspergillus
43	51	37.0	484	2	Q7M3V0_LIMPO		limulus pol
44	51	37.0	618	2	Q5Z3K8_NOCFA		nocardia fa
45	51	37.0	635	2	Q6SK16 ARTAU		arthrobacte
46	50.5	36.6	152	2	Q2NS34_SODGM		sodalis glo
47	50.5	36.6	314	2	Q3A5M5_PELCD		pelobacter
48	50.5	36.6	327	2	Q4RESO_TETNG		tetraodon n
49	50.5	36.6	330	2	Q6NWF2_BRARE		brachydanio
50	50.5	36.6	594	2	Q7SHC4_NEUCR		neurospora
51	50.5	36.6	2451	2	Q52R83 PHYCI		phytophthor
52	50.5	36.6	3067	2	Q4S7T9_TETNG		tetraodon n
53	50.5	36.6	3148	1	_		
54				2	HD_FUGRU		fugu rubrip
	50	36.2	80		Q925H8_MOUSE		mus musculu
55	50	36.2	148	2	O16122_TENMO		tenebrio mo
56	50 50	36.2	254	2	Q24NC6_DESHY		desulfitoba
57	50	36.2	264	2	Q3VWM4_PROAE		prosthecoch
58	50	36.2	291	1	POPD3_HUMAN		homo sapien
59	50	36.2	291	2	Q5T3Y8_HUMAN	=	homo sapien
60	50	36.2	291	2	Q3BCU3_RAT		rattus norv
61	50	36.2	342	2	Q1XGM4_PSEPU		pseudomonas
62	50	36.2	413	2	Q2U6A4_ASPOR		aspergillus
63	50	36.2	526	2	Q231M5_TETTH		tetrahymena
64	50	36.2	528	2.			tetraodon n
65	50	36.2	739	2	Q865F2_RABIT		oryctolagus
66	50	36.2	854	2	Q4IPQ1_GIBZE		. gibberella
67	49.5	35.9	110	2	Q7UWQ9_RHOBA		rhodopirell
68	49.5	35.9	121	2	Q7PQT7_ANOGA		anopheles g
69	49.5	35.9	157	2	Q7X094_9BACT	•	uncultured
70	49.5	35.9	202	2	Q7WAW6_BORPA		bordetella
71	49.5	35.9	397	2	Q3FAQ0_9BURK		burkholderi
72	49.5	35.9	513	2	Q6F5D8_CAMSI	Q6f5d8	camellia si
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OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:59; Search time 166 Seconds

(without alignments)

148.996 Million cell updates/sec

Title: SEQ18-SEQ22

Perfect score: 132

Sequence: 1 CSSVTAWTTGCCSKIASMETGCG 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3281787 seqs, 1072124677 residues

Total number of hits satisfying chosen parameters: 3281787

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : UniProt_8.4:*

1: uniprot_sprot:*
2: uniprot trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		፟ቔ				
Result		Query			,	•
No.	Score	Match	Length	DB	ID	Description
1	 56	42.4	58	2	Q33B75 ORYSA	Q33b75 oryza sativ
2 ·	54	40.9	220	2	Q2U0X3 ASPOR	Q2u0x3 aspergillus
3	54	40.9	254	2	Q24NC6 DESHY	Q24nc6 desulfitoba
4	54	40.9	545	2	Q57VH9_9TRYP	Q57vh9 trypanosoma
5	53.5	40.5	484	2	Q4WE13 ASPFU	Q4we13 aspergillus
6	53.5	40.5	569	2	Q4QGR6 LEIMA	Q4qgr6 leishmania
7	53	40.2	492	2	Q8RWI7_ARATH	Q8rwi7 arabidopsis
8	53	40.2	511	2	Q9LH69_ARATH	Q9lh69 arabidopsis
9	52.5	39.8	1246	2	Q5BFY1_EMENI	Q5bfy1 emericella
10	52	39.4	597	2	Q7QSQ5_GIALA	Q7qsq5 giardia lam
11	52	39.4	865	2	Q4SZU5_TETNG	Q4szu5 tetraodon n
12	52	39.4	1251	2	Q9ZNV6_ORYSA	Q9znv6 oryza sativ
13	52	39.4	1251	2	Q9SSY0_ORYSA	Q9ssy0 oryza sativ
14	51.5	39.0	81	2	Q8N0U1_HUMAN	Q8n0u1 homo sapien
15	51.5	39.0	421	2	Q95V69_TETTH	Q95v69 tetrahymena

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•								
16	51	38.6	99	2	Q5YF48_9VIRU		Q5yf48	rock bream
17	51	38.6	214	2	Q6ZSQ4_HUMAN		_	homo sapien
18	51	38.6	603	2	Q9YGH6 9NEOB		_	rana shqipe
					_			
19	50.5	38.3	173	2	Q5DCF9_SCHJA			schistosoma
20	50.5	38.3	596	2	Q3PCG7_PARDE			paracoccus
21	50.5	38.3	797	2	Q8UW62_ORENI	•	Q8uw62	oreochromis
22	50	37.9	93	2	Q5MCZ1_SHEEP	•	Q5mcz1	ovis aries
23	50	37.9	103	2	Q5MCZ2_SHEEP		Q5mcz2	ovis aries
24	50	37.9	151	1	KRB2C_SHEEP			ovis aries
25	50	37.9	152	2	Q5MCZ8 SHEEP	•		ovis aries
26	50			2	_			
		37.9	152		Q5MD00_SHEEP			ovis aries
27	50	37.9	152	2			_	ovis aries
28	50	37.9	152	2	Q7JFX1_SHEEP		Q7jfx1	ovis aries
29	50	37.9	152	2	Q5MD03_SHEEP		Q5md03	ovis aries
30	50	37.9	152	2	Q7JFW9 SHEEP		Q7jfw9	ovis aries
31	50	37.9	171	1	KRB2A SHEEP		P02438	ovis aries
32	50	37.9	177	2	Q5XJ63_BRARE			brachydanio
33	50	37.9	182	2	Q29619_SHEEP			ovis aries
34	50							
		37.9	303	2	Q2UIW2_ASPOR	•		aspergillus
35	50	37.9	348	2	Q26Q48_XANP2			xanthobacte
36	50	37.9	483	2	Q4DW34_TRYCR		Q4dw34	trypanosoma
37	49	37.1	236	2	Q4RLR8_TETNG		Q4rlr8	tetraodon n
38	49	37.1	286	2	Q8UVU5 SPAAU		Q8uvu5	sparus aura
3 9	49	37.1	459	2	Q4FZ07_LEIMA			leishmania
40	49	37.1	491	1	K2M2 SHEEP			ovis aries
41	49	37.1	537	2	Q2HEN6_CHAGB			chaetomium
					-			
42	49	37.1	734	2	Q9LNZ0_ARATH			arabidopsis
43	49	37.1	1886	2	Q7X504_9LEPT			leptospira
44	49	37.1	1889	2	Q7X2A1_LEPIN		Q7x2a1	leptospira
45	49	37.1	1890	2	Q72V39_LEPIC		Q72v39	leptospira
46	49	37.1	1891	2	Q8EZS3 LEPIN		Q8ezs3	leptospira
47	49	37.1	2458	2	Q4CUV0 TRYCR			trypanosoma
48	49	37.1	2731	· 2	Q4CV28 TRYCR			trypanosoma
49	49	37.1	2771	2	Q9WTS7_MOUSE			mus musculu
				٠ _	_			
50	49	37.1	2796	2	Q3UHK6_MOUSE			mus musculu
51	49	37.1	2825	2	O70465_MOUSE			mus.musculu
52	49	37.1	2833	2	Q3UH52_MOUSE			mus musculu
53	48.5	36.7	304	2	Q2P8K4_XANOM		Q2p8k4	xanthomonas
54	48.5	36.7	307	2	Q5H5W1_XANOR		Q5h5w1	xanthomonas
55	48.5	36.7	376	2	Q59F39 HUMAN		Q59f39	homo sapien
56	48.5	36.7	620	1	ITK HUMAN			homo sapien
57	48.5	36.7	620	2	Q32ML7_HUMAN			homo sapien
58	48.5	36.7	2262	2	_	•		flavobacter
					Q1XSM3_CYTJO			
59	48	36.4	83	2	Q5MCZ0_SHEEP			ovis aries
60	48	36.4	126	2	Q5C0X9_SCHJA			schistosoma
61	48	36.4	156	1	KRB2B_SHEEP		P02439	ovis aries
62	48	36.4	162	2	Q7JFX2_SHEEP		Q7jfx2	ovis aries
63	48	36.4	174	1	KRA15 HUMAN		Q9bys1	homo sapien
64	48	36.4	181	1	KRB2D_SHEEP		_	ovis aries
65	48	36.4	264	2	Q9ALV8 RHOSH			rhodobacter
66	48	36.4	281	2	Q5TX10 ANOGA			anopheles g
67	48	36.4	315	2	Q561R8_RAT			rattus norv
68	48	36.4	352	2	Q7ULA1_RHOBA	•		rhodopirell
69	48	36.4	362	2	Q7QJL0_ANOGA			anopheles g
70	48	36.4	367	2	Q1YTF4_9GAMM		Qlytf4	marine gamm
71	48	36.4	379	2	Q3HGC9_TRIER		Q3hgc9	trichodesmi
72	48	36.4	413	2	Q2U2P6 ASPOR		_	aspergillus
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OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:59; Search time 166 Seconds

(without alignments)

148.996 Million cell updates/sec

Title: SEQ22-SEQ18

Perfect score: 132

Sequence: 1 CSKIASMETGCCSSVTAWTTGCG 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3281787 seqs, 1072124677 residues

Total number of hits satisfying chosen parameters: 3281787

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : UniProt_8.4:*

1: uniprot_sprot:*
2: uniprot trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Result No.	Score	Query Match	Length	DB	ID .	Description
1	55.5	42.0	2451	2	Q52R83 PHYCI	Q52r83 phytophthor
2	55	41.7	732	2	Q6BGR5 DEBHA	Q6bgr5 debaryomyce
3	55	41.7	780	2	Q5AK77 CANAL	Q5ak77 candida alb
4	54	40.9	393	2	Q3JAS4 NITOC	Q3jas4 nitrosococc
5	53	40.2	1491	2	Q4QJI2 LEIMA	Q4qji2 leishmania
6	52	39.4	67	2	Q9TSF0_SHEEP	Q9tsf0 ovis aries
7	52	39.4	93	2	Q5MCZ1_SHEEP	Q5mczl ovis aries
8	52	39.4	103	2	Q5MCZ2_SHEEP	Q5mcz2 ovis aries
9	52	39.4	130	1	KRA3A_SHEEP	P02443 ovis aries
10	52	39.4	131	1	KRA3_SHEEP	P02441 ovis aries
11	52	39.4	131	2	Q9D3H4_MOUSE	Q9d3h4 mus musculu
12	52	39.4	132	1	KRA3_CAPHI	P02442 capra hircu
13	52	39.4	151	1	KRB2C_SHEEP	P02440 ovis aries
14	52	39.4	152	2	Q29620_SHEEP	Q29620 ovis aries
15	52	39.4	152	2	Q5MCZ8_SHEEP	Q5mcz8 ovis aries

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						,			
		16	F.2	20.4	1.50	_	. OEMBOO GURER	05-100	
		17	52 52	39.4 39.4	152 152	2 2	Q5MD00_SHEEP Q7JFW8_SHEEP	Q5md00 ovis aries Q7jfw8 ovis aries	
	•	18	52	39.4	152	2	Q7JFX1_SHEEP	Q7jfxl ovis aries	
		19	52	39.4	152	2	Q5MD03_SHEEP	Q5md03 ovis aries	
		20	52	39.4	152	2	Q7JFW9_SHEEP	Q7jfw9 ovis aries	•
		21 22	52 52	$39.4 \\ 39.4$	171 182	1 2	KRB2A_SHEEP Q29619_SHEEP	P02438 ovis aries Q29619 ovis aries	
		23	52 52	39.4	474	2	049335 ARATH	O49335 arabidopsis	
		24	52	39.4	480	2	Q8RWE3_ARATH	Q8rwe3 arabidopsis	
		25	52	39.4	922	2	Q2R1X1_ORYSA	Q2r1x1 oryza sativ	
		26	51	38.6	83		Q5MCZ0_SHEEP	Q5mcz0 ovis aries	
		27 28	51 51	38.6 38.6	156 162	1 2	KRB2B_SHEEP	P02439 ovis aries	
		29	51	38.6	181	1	Q7JFX2_SHEEP KRB2D_SHEEP	Q7jfx2 ovis aries P08131 ovis aries	
		30	51	38.6	248	2	Q6TXF2 RAT	Q6txf2 rattus norv	•
		31	51	38.6	254	2	Q24NC6_DESHY	Q24nc6 desulfitoba	
		32	51	38.6	428	. 2	Q7S3C6_NEUCR	Q7s3c6 neurospora	
		33 34	51 51	38.6 38.6	569 691	2	Q4QGR6_LEIMA Q3W5R7_9ACTO	Q4qgr6 leishmania Q3w5r7 frankia sp.	
		35	51	38.6	1825	2	Q4LVD2_9BURK	Q3W317 ITANKIA SP. Q4lvd2 burkholderi	
		36	51	38.6	1825	2	Q1BQ40_9BURK	Qlbq40 burkholderi	
		37	51	38.6	1848	2	Q4S113_TETNG	Q4s113 tetraodon n	
		38	50.5	38.3	360	2	Q86AK7_DICDI	Q86ak7 dictyosteli	
		39 40	50.5 50.5	38.3 38.3	360 846	2 2	Q556S1_DICDI Q31GH1_THICR	Q556s1 dictyosteli	
		41	50.5	37.9	116	2	Q7TWQ5 MYCBO	Q31ghl thiomicrosp Q7twq5 mycobacteri	
		42	50	37.9	237	2	053144 MYCTU	O53144 mycobacteri	•
		43	50	37.9	270	2	Q9ZUN5_ARATH	Q9zun5 arabidopsis	
		44	50	37.9	449	2	Q8SWZ1_DROME	Q8swz1 drosophila	
		45 46	50 50	37.9 37.9	500 618	2 2	Q28XK8_DROPS Q5Z3K8_NOCFA	Q28xk8 drosophila	
		47	50	37.9	793	2	Q5N8W8_ORYSA	Q5z3k8 nocardia fa Q5n8w8 oryza sativ	
		48	50	37.9	817	2	-	Q4q251 leishmania	
		49	50	37.9	1186	2		Q4cxc5 trypanosoma	
		50	50	37.9	1189	2	Q4DTX2_TRYCR	Q4dtx2 trypanosoma	
		51 52	50 50	37.9 37.9	1809 1809	2 2	O85740_PSEAE Q9RFM7 PSEAE	O85740 pseudomonas Q9rfm7 pseudomonas	
		53	50	37.9	1809	2	Q9HWG4 PSEAE	Q9hwg4 pseudomonas	
		54	49.5	37.5	257	1	CJ095_HUMAN	Q9h7t3 homo sapien	
		55	49	37.1	78	1	M6_LILHE	Q40189 lilium henr	
		56	49	37.1	143	2	Q1D7P2_MYXXA	Q1d7p2 myxococcus	•
		57 58	49 49	37.1 37.1	161 227	2 2	Q6R9B0_MAIZE Q4QSJ9_9LECA	Q6r9b0 zea mays (m Q4qsj9 pertusaria	
		59	49	37.1	249	2	Q5V9X6_MLVFR	Q4q5j9 pertusaria Q5v9x6 friend muri	
		60	49	37.1	407	2	Q1NTQ7_9DELT	Q1ntq7 delta prote	
		61	49	37.1	431	2	Q5GVM4_XANOR	Q5gvm4 xanthomonas	
		62 63	49 49	37.1 37.1	569	2	Q2R345_ORYSA	Q2r345 oryza sativ	
٠		64	49	37.1 37.1	675 676	1 2	ENV_MLVF5 Q7ZGR3 9GAMR	P03390 friend muri Q7zgr3 murine leuk	
		65	48.5	36.7	183	2	Q5JQU0_ORYSA	Q5jqu0 oryza sativ	
		66	48.5	36.7	370	2	Q2KJ85_BOVIN	Q2kj85 bos taurus	
		67	48.5	36.7	582	2	Q1E148_COCIM	Qle148 coccidioide	
		68 69	48.5 48	36.7 36.4	3340 85	2 2	Q4QBB2_LEIMA Q9BYT5_HUMAN	Q4qbb2 leishmania Q9byt5 homo sapien	
		70	48	36.4	96	2	Q9BYU5_HUMAN	Q9byu5 homo sapien Q9byu5 homo sapien	
		71	48	36.4	120	2	Q38IX3_TENMO	Q38ix3 tenebrio mo	
		72	48	36.4	128	1	KRA24_HUMAN	Q9byr9 homo sapien	•
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OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:59; Search time 166 Seconds

(without alignments)

148.996 Million cell updates/sec

Title: SEQ22-SEQ22

Perfect score: 126

Sequence: 1 CSKIASMETGCcskiasmetgcg 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3281787 seqs, 1072124677 residues

Total number of hits satisfying chosen parameters: 3281787

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : UniProt 8.4:*

1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		ъ					
Result		Query					
No.	Score	Match	Length	DB	ID	Descri	ption
1	55	43.7	93	2	Q5MCZ1_SHEEP	Q5mcz1	ovis aries
2	55	43.7	103	2	Q5MCZ2_SHEEP	Q5mcz2	ovis aries
3	55	43.7	151	1	KRB2C_SHEEP	P02440	ovis aries
4	55	437	152	2	Q5MCZ8_SHEEP	Q5mcz8	ovis aries
5	55	43.7	152	2	Q5MD00_SHEEP	Q5md00	ovis aries
6	55	43.7	152	2	Q7JFW8_SHEEP	Q7jfw8	ovis aries
7	55	43.7	152	2	Q7JFX1_SHEEP	Q7jfx1	ovis aries
8	55	43.7	152	2	Q5MD03_SHEEP	Q5md03	ovis aries
. 9	55	43.7	152	2	Q7JFW9_SHEEP	Q7jfw9	ovis aries
10	55	43.7	171	1	KRB2A_SHEEP	P02438	ovis aries
11	55	43.7	182	2	Q29619_SHEEP	Q29619	ovis aries
12	55	43.7	254	2	Q24NC6_DESHY	Q24nc6	desulfitoba
13	54	42.9	83	2	Q5MCZ0_SHEEP	Q5mcz0	ovis aries
14	54	42.9	156	1	KRB2B_SHEEP	P02439	ovis aries
15	54	42.9	162	2	Q7JFX2_SHEEP	Q7jfx2	ovis aries

4									
								•	
	16	54	42.9	174	1.	KRA15_HUMAN		Q9bys1 homo sapien	
	17	54	42.9	181	1	KRB2D_SHEEP		P08131 ovis aries	
	18	54	42.9	545	2	Q57VH9_9TRYP		Q57vh9 trypanosoma	
	19	52.5	41.7	512	2	Q4SAY1_TETNG		Q4sayl tetraodon n	
	20	52	41.3	272	2	Q3K4K1_PSEPF		Q3k4k1 pseudomonas	
	21	52	41.3	1848	2	Q4S113_TETNG		Q4s113 tetraodon n	
	22	51.5	40.9	1246	2	Q5BFY1_EMENI		Q5bfyl emericella	
•	23	51	40.5	152	2			Q29620 ovis aries	
	24	51	40.5	241	2	-		Q2kt15 aspergillus	
	25	51	40.5	450	2	Q34VI7_9GAMM		Q34vi7 alkalilimni	•
	26	51	40.5	826	2	Q5KTW4_ENTHI	•	Q5ktw4 entamoeba h	
	27	51	40.5	1056	2	Q51CG0_ENTHI	•	Q51cg0 entamoeba h	
	28	50.5	40.1	175	2	P90592_PLAVI		P90592 plasmodium	
	29	50.5	40.1	347	2	Q75JE6_DICDI		Q75je6 dictyosteli	
	30	50.5	40.1	347	2	_		Q55al3 dictyosteli	
	31 32	50.5 50.5	40.1	384	2	Q8I208_PLAF7		Q8i208 plasmodium	·
	33	50.5	40.1 40.1	1103	2	Q27721_PLAFA		Q27721 plasmodium	
	34	50.5	40.1	1208 1228	2 2	Q8I5T3_PLAF7 Q27724_PLAFA		Q8i5t3 plasmodium	
	35	50.5	40.1	1264	2	Q9U445_PLAFA		Q27724 plasmodium Q9u445 plasmodium	
	36	50.5	40.1	1280	2	Q2H8G8_CHAGB		Q2h8g8 chaetomium	
	37	50.5	40.1	1437	2	Q4YWJ5_PLABE		Q4ywj5 plasmodium	
	38	50.5	40.1	1467	2	Q7RHL5_PLAYO		Q7rhl5 plasmodium	
	39	50.5	40.1	1528	2	Q5CKM3_CRYHO		Q5ckm3 cryptospori	
	40	50.5	40.1	1528	2	Q5CQZ5 CRYPV		Q5cqz5 cryptospori	
	41	50.5	40.1	1528	2	-		Q95022 cryptospori	
	42	50	39.7	105	2	Q9QBT8_9VIRU		Q9qbt8 potato roug	
	43	50	39.7	227	2	Q4QSJ9_9LECA		Q4qsj9 pertusaria	
	44	50	39.7	1081	2	Q1S472_MEDTR		Q1s472 medicago tr	
	45	50	39.7	2106	2	Q6RWD9_NECHA		Q6rwd9 nectria hae	
	46	49.5	39.3	. 1358	2	Q4UHQ8_THEAN		Q4uhq8 theileria a	·
	47	49.5	39.3	1361	2	Q4N7V0_THEPA		Q4n7v0 theileria p	
	48	49	38.9	,119	2.	Q3EAM7_ARATH		Q3eam7 arabidopsis	
	49	49	38.9	172	2	Q7JFX3_SHEEP		Q7jfx3 ovis aries	
	50	49	38.9	177	1	KRA11_HUMAN		Q07627 homo sapien	•
	51 52	49	38.9	177	1	KRA13_HUMAN	:	Q8iugl homo sapien	
	52 53	49	38.9	290	2	Q9UAN3_CAEEL		Q9uan3 caenorhabdi	
	54	.49 49	38.9 38.9	394 459	2	Q1NZ29_CAEEL		Qlnz29 caenorhabdi	
	55	49	38.9	459	1 2	NHR11_CAEEL Q5VKT4 CAEEL		Q23294 caenorhabdi Q5vkt4 caenorhabdi	
	56	49	38.9	477	2	Q511U9 ENTHI		Q511u9 entamoeba h	
	57	48.5	38.5	236	2	Q4RLR8_TETNG	•	Q4rlr8 tetraodon n	
	58	48.5	38.5	370	2	Q2KJ85_BOVIN		Q2kj85 bos taurus	
	59	48	38.1	67	2	Q9TSF0_SHEEP		Q9tsf0 ovis aries	
	60	48	38.1	130	1	KRA3A SHEEP		P02443 ovis aries	
	61	48	38.1	131	1	KRA3_SHEEP		P02441 ovis aries	
•	62	48	38.1	131	2	Q9D3H4_MOUSE		Q9d3h4 mus musculu	•
	63	48	38.1	132	1	KRA3_CAPHI		P02442 capra hircu	
	64	48	38.1	203	2	Q6YR84_ONYPE		Q6yr84 onion yello	
•	65	48	38.1	227	2	Q4QSF6_9LECA		Q4qsf6 pertusaria	
•	66	48	38.1	227	2.	Q4QSJ8_9LECA		Q4qsj8 pertusaria	
	67	48	38.1	227	2	Q4QSG0_9LECA		Q4qsg0 pertusaria	
	68	48	38.1	303	2	Q2UIW2_ASPOR		Q2uiw2 aspergillus	
	69	48	38.1	360	2	Q86AK7_DICDI		Q86ak7 dictyosteli	
	70	48	38.1	360	2	_		Q556sl dictyosteli	,
	71	48	38.1	413	2	Q2U2P6_ASPOR		Q2u2p6 aspergillus	
	72	48	38.1	449	2 ·	Q8SWZ1_DROME	•	Q8swz1 drosophila	

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:58; Search time 10 Seconds

(without alignments)

210.761 Million cell updates/sec

Title: SEQ18-SEQ18

Perfect score: 138

Sequence: 1 CSSVTAWTTGcCSSVTAWTTGcg 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : PIR_80:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		₹				
Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	57	41.3	38	2	S33484	hypothetical prote
2	52.5	38.0	539	2	I49065	lymphoid-restricte
3	52	37.7	446	2	F84711	hypothetical prote
4	51	37.0	484	2	A40774	phosphocholine-bin
5	49	35.5	269	2	AG0642	4-amino-4-deoxycho
6	49	35.5	603	2	E84744	hypothetical prote
7	48.5	35.1	342	2	T29115	hypothetical prote
8	48.5	35.1	504	2	T04529	probable ammonium
9	48	34.8	47	2	T44626	hypothetical prote
10	47	34.1	152	1	KRSHHC	keratin high-sulfu
11	47	34.1	152	2	147111	high-sulfur wool m
12	47	34.1	152	2	147109	high-sulfur wool m
13	47	34.1	152	2	I47108	high-sulfur wool m

14	47	34.1	152	2	I47112	
15	47	34.1	172	1	KRSHHA	
16	47	34.1	182	2	147105	
17	47	34.1	317	2	H70566	
18	47	34.1	907	2	AB1885	
19	46.5	33.7	129	2	JH0212	
20	46.5	33.7	129	2	JH0211	
21	46.5	33.7	912	2	G96830	
22	46	33.3	55	2	E82522	
23	46	33.3	443	2	JC4088	
24	. 46	33.3	472	2	I57445	
25	46	33.3	829	2	T33283	
26	46	33.3	1418	2	T37264	
27	46	33.3	1638	2	D87749	
28	46	33.3	2488	2	T42739	
29	46	33.3	3436	2	S55659	
30	45.5	33.0	129	2	JC2144	
31	45.5	33.0	424	2	T38271	
32	45	32.6	110	2	S16496	
33	45	32.6	156	1	KRSHHB	
34	45	32.6	162	2	I47107	
35	45	32.6	182	1	KRSHHD	
36	45	32.6	284		A97203	
37	. 45	32.6	587	2	A55368	
38	45	32.6	952	2	S32954	
39	45	32.6	1457	2	T14577	
40	45	32.6	1809	2	T17403	
41	45	32.6	1809	2	C83118	
42	45	32.6	2090	2	T30075	
43	45	32.6	2533	2	T28675	
44	45	32.6	2533	2	T28674	
45						
	45	32.6	3229	2	S27852	
46	44.5	32.2	145	2	Н87200	
47	44.5	32.2	699	2	A36275	
48	44	31.9	45	1	FFYZ	
49	44	31.9	125	2	G84604	
50	44	31.9	172	2	I47106	
51	44	31.9	184	2	S74136	
52	44	31.9	296	2	C81906	
		31.9				
53	44		323	2	T51621	
54	. 44	31.9	323	2	T51645	
55	44	31.9	334	2	I64220	
56	44	31.9	393	2	JC5275	
57	44	31.9	439	2	A36385	
58	44	31.9	476	2	A83235	
59	44	31.9	506	2	AF0757	
60	44	31.9	509	2	E86273	
61	44	31.9	567	2	A84748	
62	44	31.9	647	2	B41288	
63	. 44	31.9	661	2	F70751	
64	44	31.9	676	2	T01381	
65	44	31.9	739	2	A41288	
66	44	31.9	764	2.	T07608	
67	44	31.9	810	2	S65226	
68	44	31.9	1217	1	EGMSMG	
69	44	31.9				•
			1647	2	T32934	
70	44	31.9	1820	2	A55494	

high-sulfur wool m keratin high-sulfu high-sulfur wool m hypothetical prote hypothetical prote lysozyme (EC 3.2.1 lysozyme (EC 3.2.1 hypothetical prote hypothetical prote chorionic gonadotr alkaline phosphata hypothetical prote phospholipase C (E protein unc-73b [i guanine nucleotide tegument protein 6 lysozyme (EC 3.2.1 conserved hypothet hypothetical prote keratin high-sulfu high-sulfur wool m keratin high-sulfu 2-oxoacid ferredox transferred entry hypothetical prote protein kinase Yak pyochelin syntheta pyochelin syntheta hypothetical prote alpha-51D immobili alpha-51D-immobili probable cell-surf conserved hypothet long-chain-fatty-a fulvocin C - Myxoc hypothetical prote high-sulfur wool m latex proteinase i hypothetical prote myb-like protein [myb-related transc membrane protein h voltage-gated pota surface antigen se alkaline phosphata probable cobyric a hypothetical prote hypothetical prote vascular cell adhe hypothetical prote env protein - muri vascular cell adhe chloride channel p probable membrane epidermal growth f hypothetical prote latent transformin

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:58; Search time 10 Seconds

(without alignments)

210.761 Million cell updates/sec

Title: SEQ18-SEQ22

Perfect score: 132

Sequence: 1 CSSVTAWTTGCCSKIASMETGCG 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : PIR_80:*

1: pir1:* 2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		र्ह				
Result		Query				,
No.	Score	Match	Length	$DB \cdot$	ID	Description
	- -				-	
1	50	37.9	152	1	KRSHHC	keratin high-sulfu
. 2	50	37.9	152	2	147111	high-sulfur wool m
3	50	37.9	152	2	I47109	high-sulfur wool m
4	50	37.9	152	2	I47112	high-sulfur wool m
5	50	37.9	152	2	T34649	hypothetical prote
6	50	37.9	172	1	KRSHHA	keratin high-sulfu
7	50	37.9	182	2	I47105	high-sulfur wool m
8	49	37.1	491	2	S05408	keratin, type II,
9	49	37.1	2825	2	T14271	Doc4 protein, stre
10	48.5	36.7	620	1	S33253	protein-tyrosine k
11	48	36.4	156	1	KŔSHHB	keratin high-sulfu
12	48	36.4	162	2	I47107	high-sulfur wool m
13	48	36.4	182	1	KRSHHD	keratin high-sulfu

14	47	35.6	172	2	147106		
15	47	35.6	257	2	I38025		
16	47	35.6	1103	2	JC4114		
17	47	35.6	1528	2	T37308		
18	46	34.8	38	2	S33484		
19	46		152				
		34.8		2	I47108		
20	46	34.8	349	2	155601		
21	46	34.8	967	2	S66852		
22	46	34.8	976	2	G84587		
23	46	34.8	995	2	S50358		
24	46	34.8	1391	,2	T20406		•
25	45.5	34.5	322	2	A71318		
26	45	34.1	810	2	S65226		
27	45	34.1	959	2	F87206		
28	45	34.1	1599	2	T16210		
29	45	34.1	2533	2	T28675		
30	45	34.1	2533	2	T28674		
31	44	33.3	64	2	F72392		
32	44	33.3	129	2	E70624		
33	44	33.3	246	2	D46482		
34	44	33.3	246	2	T01073		
35	44	33.3	314	2	B48149		
36	44	33.3	485	1	UHNA		
37	44	33.3	853	2	T04600		
38	44	33.3	853	2	B85429		
39	44	33.3	919	2	A42764		
40	44	33.3	1217	1	EGMSMG		
41	44	33.3	1457	2	T14577		
42	43.5	33.0	683	2	A82704		
43	43	32.6	90	2	PC2138		
44	43	32.6				•	
			94	2	T03285		
45	43	32.6	175	2	S37649		
46	43	32.6	177	. 2	S37650		
47	43	32.6	266	2	F72851		
48	43	32.6	422	2	S58173		
49	43	32.6	430	1	A24702		
50	43	32.6	567	2	T11653		
51.	43	32.6	686	2	S30075		
52	43	32.6	1196	2	H85061		
53	42.5	32.2	216	2	S05575		
54	42.5	32.2	217	2	T47175		
55	42.5	32.2	475	2	G70861		
56	42.5	32.2	1360	2	T33922		
57	42.5	32.2	1408	2	S16148		
58	42	31.8	99	2	B25439		
59	42	31.8	178	2	JC2353		
60	42	31.8	178	2	JC2355		
61	42	31.8	178	2	I50601		
62	. 42	31.8	247	2	T40191		
63	42	31.8	408	2	AC1373		
64	42	31.8	422	2	.S35197		
65	42	31.8	495	2	A70782		
66	. 42	31.8	504	2	T04529		•
67	42	31.8	541	2	A87595		
68	42	31.8	554	2	S67452		
69	42	31.8	567	2	A84748		
70	42	31.8	576	2	A49933		
. •			J. U				

keratin-like prote Ca2+-transporting ATPase homolog - C hypothetical prote high-sulfur wool m Na/taurocholate co hypothetical prote hypothetical prote hypothetical prote hypothetical prote conserved hypothet probable membrane conserved large me hypothetical prote alpha-51D immobili alpha-51D-immobili hypothetical prote truncated probable T-cell surface gly T cell surface gly epithelial glycopr angiotensin precur probable beta-gala beta-galactosidase Ca2+-transporting epidermal growth f protein kinase Yak 1,4-beta-cellobios hypothetical 90 pr anther-specific pr high-sulfur kerati high-sulfur kerati late expression fa ketoacyl synthase serine proteinase hypothetical prote ferric reductase (hypothetical prote sporozoite antigen hypothetical prote hypothetical prote hypothetical prote gene serrate prote Beejin protein - s gamma-crystallin M gamma-crystallin M gamma-crystallin M short chain dehydr conserved hypothet hypothetical prote probable monooxyge probable ammonium amine oxidase, fla hypothetical prote hypothetical prote proteinase SM tran

high-sulfur wool m

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:58; Search time 10 Seconds

(without alignments)

210.761 Million cell updates/sec

Title: SEQ22-SEQ18

Perfect score: 132

Sequence: 1 CSKIASMETGCCSSVTAWTTGCG 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : PIR_80:*

1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		ъ				
Result		Query				
No.	Score	Match	Length	DB	ID	Description
		20.4				None and the last and the second for
. 1	52	39.4	130	1	KRSH3A	keratin high-sulfu
2	52	39.4	131	1	KRGT3M	keratin high-sulfu
3	52	39.4	131	1	KRSHA3	keratin high-sulfu
4	52	39.4	132	1	KRGT3J	keratin high-sulfu
. 5	52	39.4	152	1	KRSHHC	keratin high-sulfu
6	52	39.4	152	2	I47111	high-sulfur wool m
7	52	39.4	152	2	I47109	high-sulfur wool m
8	52	39.4	152	2	I47108 .	high-sulfur wool m
9	52	39.4	152	2	147112	high-sulfur wool m
10	52	39.4	172	1	KRSHHA	keratin high-sulfu
11	52	39.4	182	2	I47105	high-sulfur wool m
12	52	39.4	446	2	F84711	hypothetical prote
13	51	38.6	156	1	KRSHHB	keratin high-sulfu

14	51	38.6	162	2	I47107
15	51	38.6	182	1	KRSHHD
16	50	37.9	270	2	E84578
17	50	37.9	1809	2	T17403
18	50	37.9	1809	2	C83118
19					
	49	37.1	676	2	T01381
20	48	36.4	175	2	S37649
21	48	36.4	676	2	S70395
2,2	47.5	36.0	349	2	I55601
23	47	35.6	591	2	I48141
24	46.5	35.2	276	2	T52349
25	46	34.8	172	2	I47106
26	46	34.8	177	2	S37650
27	46	34.8	233	2	T25295
28	46	34.8	237	2	H82568
29	46	34.8	256	2	F86463
30	46	34.8	342	2	T29115
31	46	34.8	421	2	T02135
32	46	34.8	506	2	AF0757
33	46	34.8	550	· 2	T37325
34	46	34.8	605	2	T31690
35	46	34.8	764	2	T07608
36	46	34.8	1192	2	T08609
37	46	34.8	3491	2	T43231
38	45.5	34.5	424	2	T38271
39	45.5	34.5	1360	2	T33922
40	. 45	34.1	222	2	D84520
41	45	34.1	284	2	A97203
42	45	34.1	439	2	B75487
43	45	34.1	810		
				2	S65226
44	45	34.1	1558	2	C89114
45	45	34.1	2167	2	T34395
46	44.5	33.7	2871	2	A55567
47	44.5	33.7	2871	2	A55624
48	44.5	33.7	3002	2	A47221
49	44	33.3	74	2	E90799
50	44	33.3	125	2	G84604
51	44	33.3	296	2	C81906
52	44	33.3	323	2	T51621
53	. 44	33.3	323	2	T51645
54	44	33.3	455	2	B71335
55	44	33.3	472	2	157445
56	44	33.3	567	2	A84748
57	43.5	33.0	329	2	T43012
58	43.5	33.0	340	2	H95349
59	43.5	33.0	507	2	T50398
60	43	32.6	169	1	S18946
61	43	32.6	227	2	C84431
62	. 43	32.6	353	2	D69105
63	43	32.6	433	2	S37790
64	43	32.6	596	2	E87686
65	43	32.6	676	1	VCMVPV
66	43	32.6	829	2	T33283
67	43	32.6	1418	2	T37264
68	43	32.6	1786	1	MMHUB1
69	43	32.6	2907	2	A57278
70	43	32.6	2918	2	A54105
. •		,		_	

high-sulfur wool m keratin high-sulfu probable senescenc pyochelin syntheta pyochelin syntheta env protein - muri high-sulfur kerati env polyprotein -Na/taurocholate co acrogranin - guine F-box protein FBL2 high-sulfur wool m high-sulfur kerati hypothetical prote purine nucleoside hypothetical prote hypothetical prote hypothetical prote probable cobyric a wingless protein r hypothetical prote chloride channel p hypothetical prote probable 6-deoxyer conserved hypothet hypothetical prote hypothetical prote 2-oxoacid ferredox ammonium transport probable membrane protein C37C3.6a [hypothetical prote fibrillin I - bovi fibrillin-1 precur fibrillin 1 precur hypothetical prote hypothetical prote hypothetical prote myb-like protein [myb-related transc probable purine-bi alkaline phosphata hypothetical prote conserved hypothet alcohol dehydrogen hypothetical serin ultra high-sulfur hypothetical prote coenzyme PQQ synth probable serine/th succinate dehydrog env polyprotein pr hypothetical prote phospholipase C (E laminin beta-1 cha fibrillin-2 precur fibrillin-2 precur

OM protein - protein search, using sw model

Run on: August 23, 2007, 15:29:58; Search time 10 Seconds

(without alignments)

210.761 Million cell updates/sec

Title: SEQ22-SEQ22

Perfect score: 126

Sequence: 1 CSKIASMETGCcskiasmetgcg 23

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 300 summaries

Database : PIR_80:*

1: pirl:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		૪				
Result No.	Score	Query Match	Length	DB	ID	Description
1	55	43.7	152	1	KRSHHC	keratin high-sulfu
2	55	43.7	152	2	I47111	high-sulfur wool m
3	55	43.7	152	2	I47109	high-sulfur wool m
4	55	43.7	152	2	I47112	high-sulfur wool m
5	55	43.7	172	1	KRSHHA	keratin high-sulfu
6	55	43.7	182	2	147105	high-sulfur wool m
7	54	42.9	156	1	KRSHHB	keratin high-sulfu
8	54	42.9	162	2	I47107	high-sulfur-wool m
9	54	42.9	182	1	KRSHHD	keratin high-sulfu
10	51	40.5	152	2	I47108	high-sulfur wool m
11	50.5	40.1	1103	2	JC4114	Ca2+-transporting
12	50.5	40.1	1528	2	T37308	ATPase homolog - C
13	49	38.9	172	2	147106	high-sulfur wool m

14	49	38.9	175	2	S37649
15	49	38.9	177	2	S37650
16	49	38.9	282	2	T27554
17	49	38.9	290	2	T43351
18	48	38.1	99	2	B25439
19	48	38.1	130	1	KRSH3A
20	48	38.1	131	1	KRGT3M
21	48	38.1	131	1	KRSHA3
22	48				
		38.1	132	1	KRGT3J
23	48	38.1	1558	2	C89114
24	48	38.1	2167	2	T34395
25					
	47.5	37.7	349	2	I55601
26	47	37.3	270	2	E84578
27	47	37.3	491	2	S05408
28	46.5	36.9	2825	2	T14271
29	46	36.5	463	2	G83175
30	46	36.5	557	1	S76051
31	46	36.5	810	2	S65226
32	46	36.5	3491	2	T43231
33	45.5	36.1	459	2	B36145
34	45	35.7	188	2	JC6547
35	45	35.7	257	2	138025
36	45	35.7	339	2	AG1910
37	45	35.7	620	1	S33253
38	45	35.7	1104	2	JH0181
39	44.5	35.3	591	2	I48141
40	44.5	35.3	919	2	A42764
41	44	34.9	64	2	F72392
42	44	34.9	222	2	D84520
43	44	34.9	421	2	T02135
44	44	34.9	1391	2	T20406
45	43.5	34.5	137	2	F69411
46	43.5	34.5	632	2	T04732
47	43.5	34.5	1047	2	A59246
48	43.5	34.5	1599	2	T16210
49	43	34.1	246	2	D46482
50	43	34.1	246	2	T01073
51	43	34.1	267	2	T25767
52	43	34.1	344	2	S76268
53	43	34.1	567	2	T11653
54	43	34.1	781	2	F86457
55	43	34.1	1260	2	T04440
56	42.5	33.7	60	2	S31723
57	42.5	33.7	60	2	B27490
58	42.5	33.7	60	2	JC2420
59	42.5	33.7	61	2	JC1449
60	42.5	33.7	126	2	I46489
61	42.5	33.7	450	2	H82495
62	42.5	33.7	475	2	G70861
63	42.5	33.7	534	2	E84590
64	42.5				
		33.7	559	2	A57474
65 ·	42.5	33.7	946	2	G71617
66	42.5	33.7	1820	2	S71853
67	42	33.3	90	2	PC2138
68	42	33.3	139	2	T09878
69	42	33.3	152	2	T34649
70	42	33.3	223	2	B38346
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high-sulfur kerati high-sulfur kerati hypothetical prote nuclear receptor N Beejin protein - s keratin high-sulfu keratin high-sulfu keratin high-sulfu keratin high-sulfu protein C37C3.6a [hypothetical prote Na/taurocholate co probable senescenc keratin, type II, Doc4 protein, stre probable metallo-o hypothetical prote probable membrane probable 6-deoxyer cobG protein - Pse high sulfur protei keratin-like prote periplasmic solute protein-tyrosine k nitrite reductase acrogranin - quine Ca2+-transporting hypothetical prote hypothetical prote hypothetical prote hypothetical prote hypothetical prote hypothetical prote HIRA protein - fru hypothetical prote T-cell surface gly T cell surface gly hypothetical prote probable UDP-3-0-[hypothetical prote unknown protein, 3 hypothetical prote metallothionein metallothionein B metallothionein metallothionein A cysteine-rich hair C4-dicarboxylate t hypothetical prote hypothetical prote extracellular matr SERA antigen/papai genome polyprotein hypothetical 90 pr albumin 2S storage hypothetical prote ultra-high-sulfur